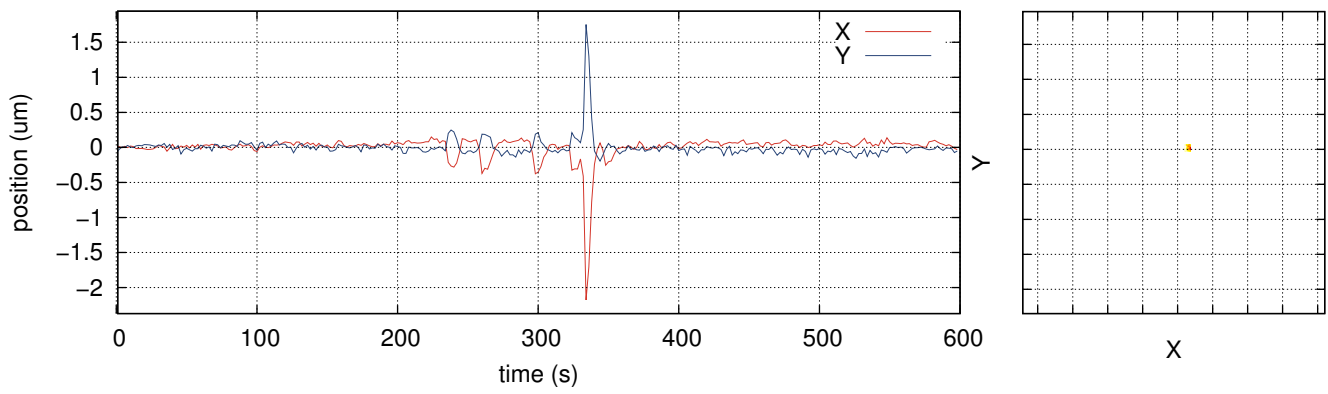
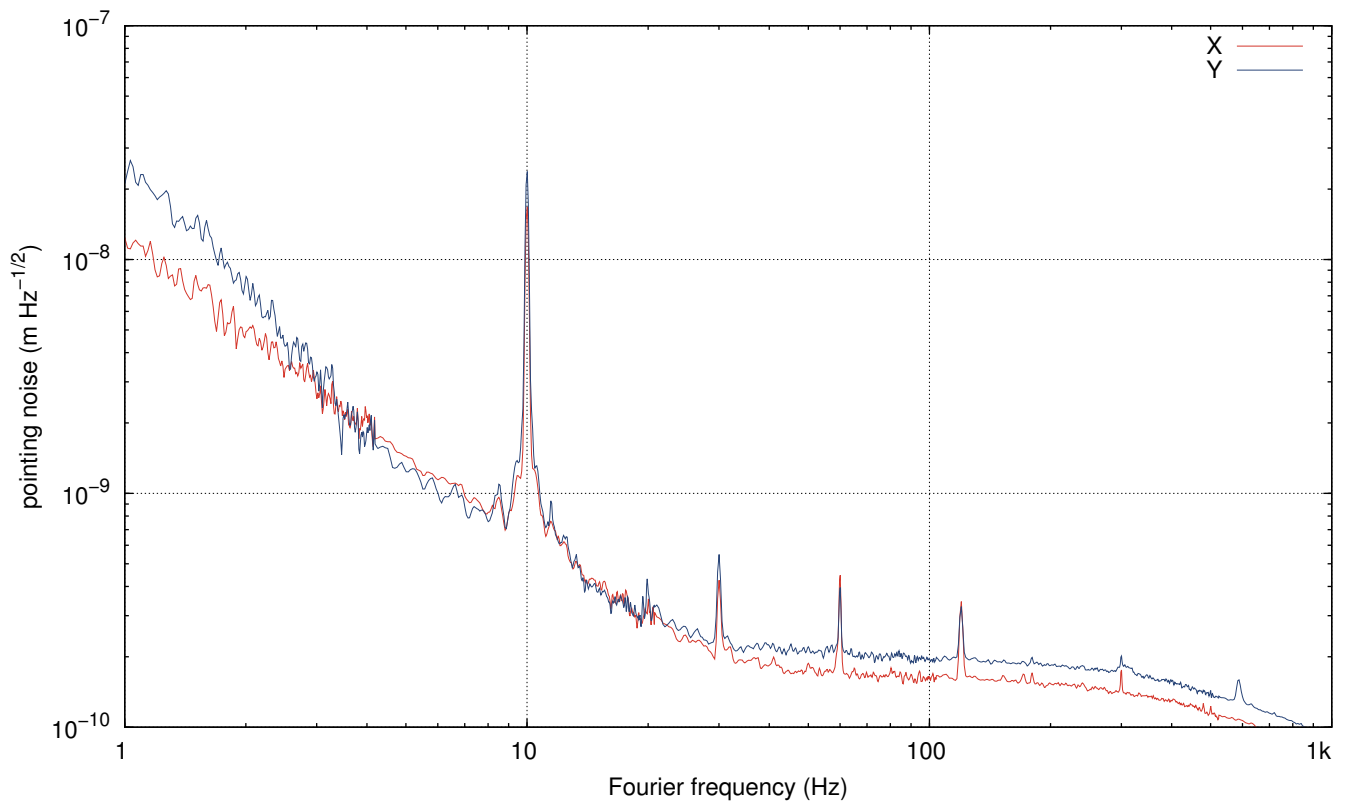


POWER STABILIZATION	
Measurement:	600 s = 10.0 min, 08. Dec 2014 15:44 PST
Stabilization:	first loop closed, integrator on; second loop injection off
Reference signal:	-2.081 V
First-loop gain:	10.0 dB
Last saturation event:	0d 0h 1m
Average AOM diffraction:	6.01%
Diffraction signal range:	0.76% . . . 21.69% (20.93% peak-to-peak, 32768 Hz samplingrate)

POWER NOISE		
	Photodiode A (PDA)	Photodiode B (PDB)
Average DC signal:	10.511 V	10.697 V
FILT signal range:	-18.808 V . . . 15.668 V (0.580 V _{rms})	-19.628 V . . . 16.097 V (0.594 V _{rms})
FILT samplingrate:	32768 Hz	32768 Hz
Photocurrent:	3.2 mA	3.2 mA
Relative shot noise level:	1.01e-08 Hz ^{-1/2}	9.97e-09 Hz ^{-1/2}



POSITION FLUCTUATIONS	
X position:	$16.657 \pm 0.196 \mu\text{m}$, $14.286 \mu\text{m} \dots 16.958 \mu\text{m}$
Y position:	$-13.975 \pm 0.155 \mu\text{m}$, $-14.423 \mu\text{m} \dots -12.031 \mu\text{m}$
Samplingrate:	32768 Hz, 32768 Hz

D A Q	
Measurement duration:	600 s = 10.0 min
Measurement start:	08. Dec 2014 15:44 PST (08. Dec 2014 23:44 UTC, 1102117490 GPS)
NDS:	h1nds1:8088 (v12r0)
User:	controls@opsws1
Channels:	H1:PSL-ISS_PDA_OUT 32768 Hz, H1:PSL-ISS_PDB_OUT 32768 Hz, H1:PSL-ISS_DIFFRACTION_OUT 32768 Hz, H1:PSL-ISS_QPD_DX_OUT 32768 Hz, H1:PSL-ISS_QPD_DY_OUT 32768 Hz, H1:PSL-ISS_LOOP_STATE_OUTPUT 16 Hz, H1:PSL-ISS_REFSIGNAL_MON_OUTPUT 16 Hz, H1:PSL-ISS_GAIN 16 Hz, H1:PSL-ISS_SECONDDLOOP_CLOSED 16 Hz, H1:PSL-ISS_SAT_MIN 16 Hz, H1:PSL-ISS_SAT_HOUR 16 Hz, H1:PSL-ISS_SAT_DAY 16 Hz
Raw data:	rawdata.zip (attached to this .pdf file, use Adobe Reader)
Calibration:	default.cali (embedded), 01. Jan 1970 00:00 UTC
Report source files:	report.zip (attached to this .pdf file, use Adobe Reader)
Program:	iss_rpn.py v0.7, Patrick Kwee, patrick.kwee@aei.mpg.de

I N F O	
Measurement method: The power noise downstream of the PMC is measured with two low-noise 2 mm InGaAs photodetectors. One of the photodetectors is used as sensor in the ISS first feedback control loop. The signal to the AOM driver is used to estimate the free-running power noise of the laser system.	
<i>no comment</i>	